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10/799,939	03/11/2004	Charles B. Worrick III	00216-664001 / Case 8134	8003
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**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Application Number: 10/799,939  
Filing Date: March 11, 2004  
Appellant(s): WORRICK ET AL.

MAILED  
FEB 07 2008  
Group 3700

\_\_\_\_\_  
Joanne N. Pappas  
For Appellant

**EXAMINER'S ANSWER**

This is in response to the appeal brief filed 11/29/2007 appealing from the Office action mailed 06/21/2007.

**(1) Real Party in Interest**

A statement identifying by name the real party in interest is contained in the brief.

**(2) Related Appeals and Interferences**

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

**(3) Status of Claims**

The statement of the status of claims contained in the brief is correct.

**(4) Status of Amendments After Final**

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

**(5) Summary of Claimed Subject Matter**

The summary of claimed subject matter contained in the brief is correct.

**(6) Grounds of Rejection to be Reviewed on Appeal**

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

**(7) Claims Appendix**

The copy of the appealed claims contained in the Appendix to the brief is correct.

**(8) Evidence Relied Upon**

5,855,071	Aprille	January 05, 1999
3,048,673	Kirk	August 7 1962

6,898,855

Jones et al.

May 31 2005 (filed

December 5th 2002)

**(9) Grounds of Rejection**

The following ground(s) of rejection are applicable to the appealed claims:

A. Claims 1, 3, 7-10, 13, 15, 18-21, 25 and 26 rejected under 35 U.S.C.

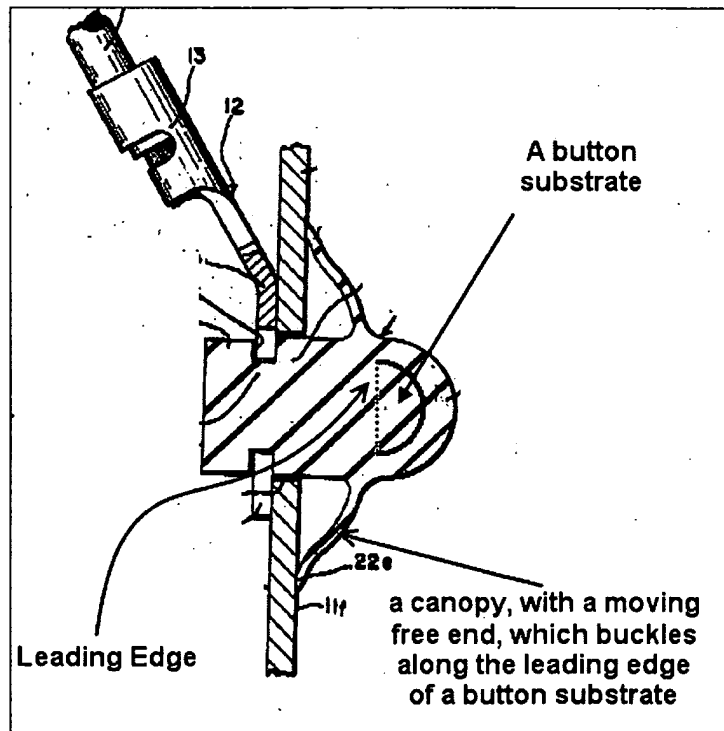
103(a) as being unpatentable over Apprille'071 in view of Kirk (USPN 3,048,673).

Apprille'071 teaches a cartridge (#14 figure 1) with a blade unit including a housing (#16 figure 1) that carries one or more shaving blades (#18 figure 1), a handle (#30, figure 3) with a handle casing (#42, figure 3), an interconnect assembly disposed at an end of the handle casing (#26, figure 3), a release button comprising a button substrate (since applicant has not defined or recited what is meant by substrate, the broadest reasonable interpretation must be applied: any portion of a button interior of the exterior surface is rightly construed as a button substrate) and a flexible canopy (50) extending outwardly from the button substrate toward the handle casing (#50, figure 3). Apprille'071 further teaches that the edge of the canopy contacts the handle casing (#50 is in contact with #12, figures 16 & 17). Apprille'071 further teaches that the edge of the canopy contacts the handle casing when the button is in an unloaded position (#50 is in contact with #12, figures 16 & 17). Apprille'071 further teaches that the edge of the canopy contacts the handle casing when the button is in an actuated position (#50 is in contact with #12, figures 16 & 17). Apprille'071 further teaches that the edge of the canopy contacts the handle casing having an angle of no greater than 110 degrees.

This is because the angle formed between the button and the handle casing varies and is at a maximum in the front center region of the canopy, which at no time is greater than 110 degrees (#50 is in contact with #12, figures 16 & 17). The angle between the canopy and the handle casing wall varies from about 50 degrees to about 110 degrees.

Aprille'071 does not teach that the flexible canopy buckles during actuation, and returns to an unbuckled state after actuation.

Kirk discloses a button as seen in the figure below:



In the same field of problem solving endeavor (concealing part of an interconnect assembly of a button) it would have been obvious to one skilled in the art at the time of the invention to modify Aprille'071 by making the canopy buckle at least along a leading edge of the button substrate during actuation, as taught by Kirk. It **would have been an obvious design choice to select a buckling canopy over a**

**non-buckling canopy. The substitution of one known button mechanism for another is within the level of ordinary skill in the art.**

Regarding claims 25 and 26, Aprille'071 in view of Kirk does not teach that the canopy be between .3 and .6 mm thick, however this limitation lacks criticality. The specification merely states this range as follows: "The thickness of the canopy can be between about 0.3 mm and 0.6 mm". No reason or rationale is provided, nor is the limitation of between .3 and .6 mm in any way essential to the function of the canopy which is to conceal the connecting assembly. A thickness of .1mm or 1mm would conceal just as effectively.

Alternatively, it would have been obvious to provide the canopy with a thickness of between 0.3mm and 0.6mm because it has been held that it is routine in the art to discover an optimum value of a result effective variable.

It has been held that the combination of elements known in the prior art to be used in accordance with their known functions *is unpatentable as a matter of law* absent a showing that the combination has results which are *unexpectedly* advantageous over the prior art. Please see *Sakraida v. Ag Pro, Inc.* U.S. Supreme Court No. 75-110 425 US 273, 189 USPQ 449 (1976), Which states "patent[s] for combination that only unites old elements with no change in their respective functions withdraws what is already known into field of its monopoly and diminishes resources available to skillful men" and

[a] patent [which] simply arranges old elements with each performing the same function it had been known to perform, although perhaps producing a more striking result than in previous combinations...are not patentable under standards appropriate for a combination patent"; also see *Anderson's Black Rock, Inc. v. Pavement Salvage Co., Inc.* U.S. Supreme Court 396 US 57, 163 USPQ 673 (1969) which states "while the combination of old elements performed a useful function, it added nothing to the nature and quality of the radiant-heat burner already patented".

The Supreme Court in *KSR International Co. v. Teleflex Inc. et al.* No. 04-1350, 550 U.S. \_\_\_\_ (2007); 127 S. Ct. 1727; 82 USPQ2d 1385; affirmed both Sakraida and Anderson's requirement that to be patentable a combination needed to provide some synergistic effect. See Slip op. at 13 lines 3-19. Using known elements for their known functions is *as a matter of law not patentable*, since it removes resources available to skillful men, contrary to U.S. Const., Art. I §8, cl.8. which provides patent monopolies to promote the progress of useful arts. See Slip op. *KSR* at 24 lines 5-7. Additionally, it has been held that one of ordinary skill in the art is not an automaton, and possesses ordinary creativity to use a mechanism for something *other than its avowed purpose* (*KSR* slip op. at 17, lines 1-9).

Each of the elements "release buttons in razors", "canopies in buttons" and "buckling canopies in buttons" are known as seen in the cited prior art (above); their combination is unpatentable absent a showing that one of ordinary skill would be unable to effect their combination, or their combination provides unexpectedly good results (more than a duplicated effect). Appellant is attempting to remove from the public

subject matter which an ordinarily skillful person could have used, and would have had reason to do so.

B. Claims 12 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over in view of Aprille'071 in view of Kirk as applied to claims 13, 7-10, 13, 15, 18-21, 25 and 26 above and further in view of Jones et al. (USPN 6,898,855).

Jones et al teaches the use of thermoplastic elastomer in buttons for gripping by the hand. (Col. 8 lines 1-5).

It would have been obvious to one skilled in the art at the time of the invention to use thermoplastic elastomer as a canopy since Jones describes thermo plastic as being both "soft" and similar to rubber. It is known to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious mechanical design expediency. *In re Leshin*, 125 USPQ 416. Jones demonstrates that thermoplastic elastomer was a known material having comfortable (soft) and resilient (comparison to rubber) properties. It is clear Prima Facie then that it is suitable as a buckling canopy that may or may not come into contact with human skin.

#### **(10) Response to Argument**



"The failure of appellant to separately argue claims which appellant has grouped together constitutes a waiver of any argument that the Board must consider the patentability of any grouped claim separately. See *In re McDaniel*, 293 F.3d 1379, 1384, 63 USPQ2d 1462, 1465-66 (Fed. Cir. 2002)". See MPEP1205.02 (vii). Appellant has failed to argue any dependent claim separately, and therefore each claim will stand or fall by claim 1, (except claim 12, which was argued separately).

A.

Appellant alleges the structure of Apprille is not flexible (conceded) nor a canopy. The allegation that Apprille does not disclose a canopy is clearly erroneous. If canopies are by their nature flexible, then why would the claim need to recite a "flexible canopy". The claim itself demands the interpretation that a canopy may be something other than flexible. In this sense the structure of Apprille is unquestionably a canopy. As stated above, the function of the canopy **As stated by appellant** is to "conceal at least part of an interconnect assembly" (specification page 2 line 4); which clearly is accomplished just as readily by a flexible and non-flexible canopy. This argument is not persuasive.

Appellant alleges that Kirk does not buckle in accordance with a special definition provided in the specification ("Hence, applicants (sic) define the notion of buckling in their specification..." page 5 of the Appeal Brief). **There is no such special definition**, nor, truly can a 'notion' be a clear definition; such **could** be clearly indicated by such words as "by buckle I mean:" or "buckle shall be defined as" which is necessary in order to impute such a definition to the claims see 2106 II C.; which states:

"While it is appropriate to use the specification to determine what applicant intends a term to mean, a positive limitation from the specification cannot be read into a claim that does not itself impose that limitation... An applicant can always amend a claim during prosecution to better reflect the intended scope of the claim."

And also states:

"Where an explicit definition is provided by the applicant for a term, that definition will control interpretation of the term as it is used in the claim. *Toro Co. v. White Consolidated Industries Inc.*, 199 F.3d 1295, 1301, 53 USPQ2d 1065, 1069 (Fed. Cir. 1999)"...

"Any special meaning assigned to a term "must be sufficiently clear in the specification that any departure from common usage would be so understood by a person of experience in the field of the invention." *Multiform Desiccants Inc. v. Medzam Ltd.*, 133 F.3d 1473, 1477, 45 USPQ2d 1429, 1432 (Fed. Cir. 1998)."

What appellant actually recites in pp. 2 lines 7-9 of the specification is "This buckling and recovery action maintains the position of the canopy between the wall and the button substrate, while concealing the connecting assembly."

**This is not sufficiently clear to warrant being called a special definition as per 2106 II C. The Canopy bends and slides and therefore only vaguely maintains its position. Accordingly it would be inappropriate to call this vague language a "special definition"**

It is submitted that the construction of the claims is necessitated thereby, and examiner must apply the standard of claim interpretation during prosecution as follows:

"claims in a pending application should be given their broadest reasonable

interpretation" consistent with the specification and prior art. In re Pearson , 181 USPQ 641 (CCPA 1974). See additionally MPEP 904.01, and also In re Morris, 127 F.3d 1048, 44 USPQ2d 1023 (Fed. Cir. 1997). It has been established that during examination, where applicant has the ability to amend claims, the standard of claim interpretation is that the broadest reasonable interpretation be given to all the terms of a claim, *absent a specific definition provided in the specification*, which would then control.

Appellant alleges that Kirk does not show a canopy that buckles to maintain the position of the canopy between the wall and the button substrate. This is incorrect. **Kirk clearly shows a canopy that remains between the substrate and the wall**; thus it maintains it's position. Kirks Canopy bends and slides, but so does appellants'.

Appellant further characterizes the buckling state, not in accordance with the claim, but with limitations from the specification, all of which are disclosed as optional ("may additionally comprise..." "can have" etc. ).

**Additionally, if appellants' alleged special definition of buckling is to be considered, it is noted that the allegation of special definition was not timely made, being first presented in this appeal brief. Such a special definition would change the scope of the claims, and thus is not an admissible argument following a proper final rejection.**

Appellant alleges that the modification of Apprille in view of Kirk is to modify Apprille to conceal an interconnect assembly (pp. 5 line 12-14 of Brief) and is without motivation. This is an incorrect characterization of Apprille. It was clearly stated that

*both Apprille and Kirk conceal the interconnect assembly.* The combination is a substitution of one button for another. Furthermore The Supreme Court in *KSR International Co. v. Teleflex Inc. et al.* No. 04-1350, 550 U.S. \_\_\_\_ (2007), 82 USPQ2d at 1396, foreclosed the argument that a specific teaching suggestion or motivation is required to support a showing of obviousness. See the Board decision *Ex parte Smith* – USPQ2d--, slip op at 20, (Bd. Pat. App. & interf. June 25, 2007).

B.

Appellants argument that there is no motivation to use the thermoplastic elastomer of Jones (pp 6 of the Brief, line 7) is clearly without merit, since a motivation was established in the record on the basis of Jones itself, and was explicitly stated in Jones. Furthermore this argument is moot, since the Supreme Court in *KSR International Co. v. Teleflex Inc. et al.* No. 04-1350, 127 S. Ct. 1727; 82 USPQ2d 1385; 550 U.S. \_\_\_\_ (2007), 82 USPQ2d at 1396, foreclosed the argument that a specific teaching suggestion or motivation is required to support a showing of obviousness. See the Board decision *Ex parte Smith* –USPQ2d--, slip op at 20, (Bd. Pat. App. & interf. June 25, 2007).

In the canopy of Kirk (as being combined) the canopy extends over the whole substrate and *is therefore in contact with a users finger* when combined with Apprille. This style of canopy is not precluded by the claims as written. Thus one looking at Apprille, Kirk and Jones *would be* motivated to make the canopy comfortable to a user.

The argument that the canopy is not touched by a user is additionally not considered persuasive, since in applicants figures 32, 39, 42 and 43, it is clear that the canopy is at least in very close proximity to where the finger of a user would be.

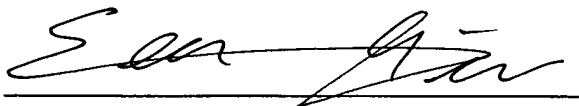
Each argument having been found to be un-persuasive, moot, not in accordance with the claims, or otherwise insufficient to overcome the correctly made and maintained Prima Facie case of obviousness, the case is submitted herewith to the Board of Appeals and Interferences.

**(11) Related Proceeding(s) Appendix**

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,



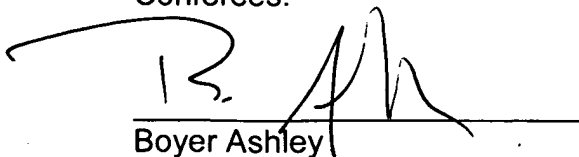
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Examiner A.U. 3724



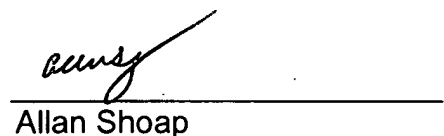
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#### RELATED APPEALS AND INTERFERENCES

There are no known related appeals, interferences, or judicial proceedings.

#### STATUS OF CLAIMS

Claims 2, 4-6, 11, 14, 16, 17, 22, and 23 are cancelled.

Claims 1, 3, 7-10, 12, 13, 15, 18-21 and 24-26 are pending.

Claims 1, 3, 7-10, 12, 13, 15, 18-21 and 24-26 are rejected.

Claims 1, 3, 7-10, 12, 13, 15, 18-21 and 24-26 are appealed.

A complete copy of the appealed claims is set forth in the Claims Appendix attached herein.

#### STATUS OF AMENDMENTS

No amendment was filed.

#### SUMMARY OF CLAIMED SUBJECT MATTER

The present claims are directed to a handle for a shaving razor. Claim 1 is directed to a handle casing (170), an interconnect assembly (18) disposed at an end of the handle casing (170) to releasably connect a cartridge (12) to the handle (14) and including a release button (196) having a button substrate (198) and a flexible canopy (200). This is set out on page 18, lines 5-11 of the specification in conjunction with Figs. 1 and 41A. Claim 1 is further directed to a flexible canopy (200) constructed so that a free edge of the flexible canopy (200) contacts a wall (306) formed by the handle casing (170) when the release button (196) is in an unloaded position. This is set out on page 20, lines 15-17 of the specification in conjunction with Fig. 42. The flexible canopy (200) buckles when the button substrate (198) is moved towards the cartridge (12) as a user actuates the release button (196) causing the free edge to move along the wall (306) as shown in Fig. 43 and set out in the specification on page 20, lines 18-21.

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The flexible canopy (200) is constructed to recover, after buckling, toward an original, unloaded position. This is set out on page 20, lines 20-21 of the specification in conjunction with Figs. 42 and 43. The contact angle between the outer surface of the canopy and the wall (306) is no greater than about 110 degrees. The contact angle varies along a periphery of the canopy and may vary from about 110 degrees to 50 degrees. The maximum contact angle between the outer surface of the canopy and the wall is at a center region of the canopy. This is set out on page 20, lines 22-30 of the specification in conjunction with Figs. 42 and 44.

Base Claim 13 is directed to a shaving razor (10) with a cartridge (12) including a blade unit (16) and connecting member (18) which is pivotally connected to the blade unit (16) where the blade unit (16) includes a housing (20) carrying one or more shaving blades. This is set forth on page 4, lines 16-23 of the specification in conjunction with Figs. 1 and 2. The shaving razor (10) also has a handle (14) connected to the cartridge (12) including a release button (196) having a button substrate (198) and an elastomeric flexible canopy (200) extending outwardly from the button substrate (198). This is set out on page 19, lines 17-30 and page 20, lines 1-20 of the specification in conjunction with Figs. 42 and 43 and also other figures, such as Figs. 31-33 and 39.

#### GROUND'S OF REJECTION TO BE REVIEWED ON APPEAL

1. Whether claims 1, 3, 7-10, 13, 15, 18-21, 25 and 26 are unpatentable under 35 U.S.C. §103(a) as being obvious over Apprille et al. (US 5,855,071), hereinafter Apprille, in view of Kirk (US 3,048,673), hereinafter Kirk.
2. Whether claims 12 and 24 are unpatentable under 35 U.S.C. §103(a) as being obvious over Apprille in view of Kirk and further in view of Jones et al. (US 6,898,855), hereinafter Jones.

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the pusher arms 192 and 194 are pushed forward and the canopy 200 buckles *between* the button substrate 198 and the surface 306. When the button 196 is released, the spring 205 forces the button 196 back to its initial position and the canopy 200 recovers to its unbuckled state." (See specification page 20, lines 15-21, emphasis added). Further characterizing the buckling state, the specification states that "the contact angle  $\phi_1$  between the handle casing 170 and the canopy 200 *at most* about 110 degrees, when the button is at its *rest position* and the canopy is fully recovered...the contact angle  $\phi$  varies along the periphery of the canopy 200 from a *maximum* contact angle  $\phi_1$  (e.g., about 110 degrees) at the center of the canopy 200 (Fig. 42) to a *minimum* contact angle  $\phi_2$  (e.g., about 50 degrees) at each side of the canopy (Fig. 44)." (See specification page 20, lines 22-30, emphasis added). Hence, Applicants define the notion of buckling in their specification and clearly depict the buckled state in Fig. 43.

Applicants fail to see any motivation to modify the ejector button of Apprille to conceal an interconnect assembly by providing a switch as taught by Kirk as suggested in the Office Action. Apprille's button is used to push the cartridge out by sliding on a track on a guide surface in the cartridge support structure and does not serve to conceal an interconnect assembly. Furthermore, if Apprille's button were modified to flatten out radially as disclosed by Kirk, the new construction would run counter to Apprille's ability to slide on the track in a given direction.

Accordingly, Applicants contend that independent claim 1 is patentable over Apprille in view of Kirk. Since claims 3, 7-10 and 25 depend from claim 1, they are also patentable over Apprille in view of Kirk for the same reasons as claim 1. Additionally, for reasons discussed above in conjunction with claim 1, similar independent claim 13 is also patentable over Apprille in view of Kirk and hence, claims 15, 18-21 and 26 which depend from claim 13 are also patentable over the cited references.

2. Claims 12 and 24 stand rejected under 35 U.S.C. §103(a) over Apprille in view of Kirk and further in view of Jones (US 6,898,855).